

Report Date: 30 Apr 2012

Summary Report for Individual Task
551-8ST-1011
Perform Maintenance on a Rigid Inflatable Boat (RIB)
Status: Approved

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

DESTRUCTION NOTICE: None

Condition: Given a rigid inflatable boat, cleaning supplies, RIB repair kit, and any of these scenarios: routine scheduled maintenance , after actual use or being exposed/saturated in salt water, or new equipment being installed.

Standard: The Soldier inspected the RIB, cleaned and maintained its parts, repaired any damages, and stored the RIB so it was ready for use.

Special Condition: None

Special Standards: None

Special Equipment:

MOPP:

Task Statements

Cue: None

DANGER

None

WARNING

None

CAUTION

None

Remarks: None

Notes: None

Performance Steps

1. Perform routine inspections and inspect before each use.

- a. Check that the steering cable and throttle control cables are properly greased.
- b. Check the battery is in good condition and fully charged before the boat is launched.
- c. Check the tightness of all engine securing bolts to the transom.
- d. Check the fuel system and the tightness of the hose clamping rings, and replace old damaged elements as necessary.
- e. Check spare parts and tools and replace as necessary.
- f. Check the hull for abrasions, scratches, gouges, etc.
- g. Check the outboard motor.
 - (1) Clean the exterior for cleanliness and clean soft cloth if necessary.
 - (2) Check the tiller arm and throttle for loose fitting and tighten if necessary.
 - (3) Check that the gear shift lever moves into forward and reverse position.
 - (4) Check the propeller for debris, foreign objects, and loose/broken blades.

Note: Refer to the manufacturer's manual for maintenance of specific outboard motors. Refer any problems encountered during the inspection to unit maintenance.

2. Clean the buoyancy tube.

Note: Do NOT use high pressure cleaning equipment likely to damage the boat.

NOTE: Do NOT use strong detergents (acid, trichloroethylene), silicone-based products, or like agents on buoyancy tubes. If spills of these items occur, immediately wash off with water.

- a. Open the drain port(s) and wash the boat with a hose to remove sand and particles.
- b. Clean with soap and fresh water.
- c. Remove all traces of tar using a specific tar-removal product if possible.
- d. Check the buoyancy tube for leaks with foamy soap and water.
- e. Rinse with fresh water and dry thoroughly.
- f. Check that valves and gaskets are clean and not damaged.
- g. Check that the self bailer is not clogged.
- h. Check the air-tightness of the boat.

Note: Loss of pressure over 24 hours is not unusual. Add air as necessary. If loss of pressure exceeds 10 mb (0.14 PSI)/5 hours for buoyancy tube, check the air-tightness of the boat. Temperature has a great influence on air pressure. A variation of 1° C results in a variation in the same way of about +/- 4 mb (0.06 PSI). If you have a problem with an air leakage, check that all valves are intact and in a closed position (nothing clogging valve).

3. Clean the hull.

- a. Wash the deck and hull with clean water and soap.
- b. Dry thoroughly with rags or towels.
- c. Check that the drain ports are not clogged.
- d. Open the drainage hole caps to evacuate water.

4. Maintain stainless steel parts.

- a. Wash stainless steel parts with fresh water after each use.
- b. Grease or polish stainless steel parts after each use.

Note:

Avoid scouring stainless steel surfaces.

Avoid contact with iron tools. Use chrome tools instead.

5. Maintain the seats.

- a. Wash upholstery with soap and water.
- b. Dry thoroughly with rags or towels.
- c. Repair any damage immediately to prevent deterioration. Patch with a vinyl material and PVC adhesive until a professional repair can be made (Refer to Step 6).

CAUTION

Do NOT expose repairs to the sun or rain.

Do NOT leave the adhesive tube next to a heat source or direct flames.

Always work in a well-ventilated area when using adhesives.

Avoid contact with the skin or eyes, swallowing it, or inhaling adhesive vapors.

6. Repair damages.

- a. Tears less than 50 millimeters (mm) (2 inches)

(1) Choose a suitable patch from the repair kit that overlaps the tear by a minimum of 25mm (1 inch) all around.

Note: Choosing a repair patch that is too small will cause it to blister when the tube is inflated.

(2) Use a wax crayon to mark around the area to be repaired, using the patch as a guide.

(3) Clean the contact surfaces of the patch and the area to be repaired with abrasive paper.

(4) Wipe and dust particles from both surfaces and make sure they are completely dry.

(5) Apply two coats of adhesive (from the blue adhesive tube) to both surfaces, allowing the first coat to dry thoroughly before applying the second coat.

Note: The shelf life for the adhesive in the tube is one year.

(6) Allow the second coat to dry to a "tacky" condition (5 to 10 minutes).

(7) Apply the patch, ensuring there are no creases or bubbles.

(a) Smooth out the patch with a spatula-shaped tool (e.g., the end of a spoon).

(b) Work from the center of the patch towards the outside edges.

b. Tears larger than 50mm (2 inches)

Note: Tears larger than 50mm (2 inches) will require a patch applied both inside and outside the buoyancy tube. It is recommended that repairs of this kind are carried out by experienced, qualified service agents.

NOTE: After the repair has been made, allow at least 12 hours before inflating.

c. Slow punctures

(1) Trace the leak by painting over the area with a soapy lather.

(2) Mark the spot where bubbles develop.

(3) Follow the repair instructions in Section 6a or 6b above.

d. Small repairs on the hull.

(1) Remove or reduce small scratches with polish or other appropriate products.

(2) Remove deeper scratches with polyester gel.

Note: For major repairs, refer to unit maintenance or a qualified service agent.

7. Store the RIB.

a. Store the RIB in a clean, dry place that is not affected by major variations in temperature and other damaging factors.

b. Store the boat with the tube lights lightly inflated.

Note: If this is not possible, fold the tubes down into the glass fiber section of the hull and tie them loosely in position.

c. Maintain the engine as instructed by the engine manufacturer prior to storing.

Note:

For long-term storage in the sun (especially in tropical regions), protect the boat with a breathable canvas covering. Store away from rodents.

If the boat is stored inflated, make sure it is not subjected to deformations.

(Asterisks indicates a leader performance step.)

Evaluation Preparation: Ensure that all information, references and equipment required to perform the task are available. Use the FM and the evaluation guide to score the soldier's performance. Brief the soldier. Tell the soldier what he is required to do IAW the task conditions and standards.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Perform routine inspections?			
2. Clean the buoyancy tube with the proper materials?			
3. Clean the hull?			
4. Maintain stainless steel parts?			
5. Maintain the seats?			
6. Repair any damages using the correct materials and procedures?			
7. Store the RIB properly?			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	TM 55-1905-223-10	OPERATORS MANUAL FOR LANDING CRAFT, UTILITY (LCU 2000 CLASS) (NSN 1905-01-154-1191) (REPRINTED W/BASIC INCL C1-9)	Yes	No

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT.

Safety: In a training environment, leaders must perform a risk assessment in accordance with FM 5-19, Composite Risk Management. Leaders will complete a DA Form 7566 COMPOSITE RISK MANAGEMENT WORKSHEET during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, NBC Protection, FM 3-11.5, CBRN Decontamination. In a training environment, leaders must perform a risk assessment in accordance with FM 5-19, Composite Risk Management. Leaders will complete a DA Form 7566 COMPOSITE RISK MANAGEMENT WORKSHEET during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, NBC Protection, FM 3-11.5, CBRN Decontamination.

Prerequisite Individual Tasks :

Task Number	Title	Proponent	Status
052-204-1108	Inspect Safety Equipment	052 - Engineer (Individual)	Approved

Supporting Individual Tasks : None

Supported Individual Tasks : None

Supported Collective Tasks : None